C818: **Measurement of market impact functions**

Presenter: **Virmantas Kvedaras**, Vilnius University, Lithuania

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The issue is considered of estimation of a conditional market impact function related to any recorded action in an order-driven financial market. A functional series expansion based on some orthonormal basis functions is used to get a flexible estimator of the underlying market impact function conditioned upon a series of market state variables. We formulate conditions and propose a consistent estimator of market impact functions in a price formation model, where a conditional expectation of a price change during a period is represented as an outcome of all market impacts related to all the events that have happened in the considered time period and measured at the last moment of the period. The issues related to an empirical implementation and testing of some key assumptions of the model are also discussed.

C865: **Empirical evidences about hourly electricity prices in some European markets**

Presenter: **Paolo Chirico**, Universita di Torino, Italy

The study originates from a work about the economic risk analysis of a windpower plant to be built on an Italian site. The annual gain distribution is drawn by means of simulations of a business year. A crucial point is the simulation of the hourly sale prices of the electricity on the basis of a suitable time-series model. The model should take into account the typical features of the hourly electricity prices: (i) seasonality, particularly with daily and weekly periodicity; (ii) mean-reversion that can be formalised by including an AR(1) relation in the model; (iii) jumps and spikes that can be due to the difficulty of the electricity supply to match the demand; (iv) volatility clustering; (v) leptokurtic distribution. Analysing the 2008-2009 Italian PUN (national common price) of the electricity an easy seasonal AR-GARCH model with t-Student standardised innovation has been detected. The same type model has been tested with electricity prices of Spain and Norway markets. The model fits well both of the data. At last a singular simplification of the model is analysed: the model can be reduced to an AR(1)-GARCH model by means of an average of seasonal differences.

C898: **Disentangling crashes from tail events**

Presenter: **Sofiane Aboura**, University of Paris Dauphine, France

The study of tail events has become a central preoccupation for academics, investors and policy makers, given the recent financial turmoil. However, what differentiates a crash from a tail event? This article answers this question by taking a risk management perspective that is based on an augmented extreme value theory methodology with an application to the French stock market (1968-2008). Our empirical results indicate that the French stock market experienced only two crashes in 2007-2008 among the 12 identified over the whole period.